REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-18 are now present in the application. Claims 1-14 have been amended. Claims 15-18 have been added. Claims 1 and 8 are independent. Reconsideration of this application is respectfully requested.

Priority Under 35 U.S.C. §119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. §119, and receipt of the certified priority document.

Information Disclosure Citation

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statement filed on July 27, 2006, and for providing Applicants with an initialed copy of the PTO-1449 form filed therewith.

Drawings

Applicants thank the Examiner for accepting the formal drawings of the instant application.

Claim Objections

Claims 1 and 8 have been objected to due to the presence of minor informalities. In view of the foregoing amendments, in which the Examiner's helpful suggestions have been followed,

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it is respectfully submitted that this objection has been addressed. Accordingly, Applicants respectfully submit that this objection has been obviated and/or rendered moot. Reconsideration and withdrawal of this objection are respectfully requested.

Claim Rejections Under 35 U.S.C. §§ 102 & 103

Claims 1, 6-8, 13 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Appelby, U.S. Patent Application Publication No. US 2005/0171757. Claims 2 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Appelby in view of Fukmochi, U.S. Patent No. 5,321,607. Claims 3 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Appelby in view of Fukmochi, and further in view of Sata, U.S. Patent No. 5,608,623. Claims 4 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Appelby in view of Tolin, U.S. Patent No. 5,490,061. Claims 5 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Appelby. These rejections are respectfully traversed.

In light of the foregoing amendments to the claims, Applicants respectfully submit that these rejections have been obviated and/or rendered moot. As the Examiner will note, independent claims 1 and 8 have been amended.

Independent claim 1 now recites a combination of steps including "an input step in which the one or more keywords in the source language are input via an input means without inputting a full text sentence in the source language, the one or more keywords being a segment of the full text sentence in the source language; a sentence pair extraction step in which a sentence pair extraction means extracts one or more sentence pairs each including at least one of the keywords from a parallel corpus database including partial correspondence information indicating

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correspondence between a word/phrase in the source language and a word/phrase in the target

language in each sentence pair; a keyword-related phrase storage step in which a target-language

keyword-related phrase corresponding to each source-language keyword-related phrase is

detected from the partial correspondence information of each sentence pair and stored in the

form of a keyword-related phrase table in a storage means; a text sentence candidate generation

step in which a text candidate generation means assumes dependency relationships among

keyword-related phrases in the target language described in the keyword-related phrase table and

generates one or more target-language text sentence candidates; and an output step in which at

least one text sentence candidate is output from an output means corresponding to the full text

sentence in the source language."

Independent claim 8 now recites a combination of elements including "input apparatus

for inputting the one or more keywords in the source language without inputting a full text

sentence in the source language, the one or more keywords being a segment of the full text

sentence in the source language; a parallel corpus database including partial correspondence

information indicating correspondence between a word/phrase in the source language and a

word/phrase in the target language in each sentence pair; a sentence pair extraction means for

extracting one or more sentence pairs each including at least one of the keywords from the

parallel corpus database; a keyword-related phrase storage means for detecting a target-language

keyword-related phrase corresponding to each source-language keyword-related phrase from the

partial correspondence information of each sentence pair and storing the detected target-language

keyword-related phrase in the form of a keyword-related phrase table; a text candidate

generation means that assumes dependency relationships among keyword-related phrases in the

target language described in the keyword-related phrase table and generates one or more target-language text sentence candidates; and an output means for outputting at least one text sentence candidate corresponding to the full text sentence in the source language."

Support for the amendments to claims 1 and 8 can be found at least on page 20, lines 6-25 and page 21, lines 1-2 of the specification as originally filed. Applicants respectfully submit that the above combinations of steps and elements as set forth in amended independent claims 1 and 8 are not disclosed nor suggested by the references relied on by the Examiner.

In a conventional translation machine, the target language (an output language) was generated based on the analysis a full text sentence in an input/source language). Depending on the performance of the conventional machine translation system, it may be necessary for a user to modify the text sentence in the source language into a form that can be better handled in the system. However, if the user is not experienced, it will be difficult to obtain an accurate result. Unlike the conventional translation machine, in the present invention, a full text sentence in the input/source language does not have to be inputted into the system. Instead, by inputting one or more keywords (which merely are a *segment* of the full text sentence) without inputting such a full text sentence, the text sentence in the target language can be output. Therefore, the present invention does not require an experienced user.

Appleby simply discloses a convention translation machine requiring input of a full text sentence in the source language in order to generate a text sentence in the target language. In particular, Appleby in paragraph [0166] discloses:

> In *a step 602 of FIG. 17, a sentence of the source language file to be translated is selected.* In step 610, a source surface tree of a language component is derived using the parser, which *reproduces the word order in the input source text.* In step 620, the corresponding dependency graph is determined. In step 692,

from the source dependency graph, the target dependency graph is determined. In step 694, from the target dependency graph, the target surface tree is determined, and used to generated target language text, in step 696, the target language text is stored. The process continues until the end of the source text (step 698). (Emphasis added).

In other words, the *full text sentence* in the source language to be translated *has to be selected/inputted* at the outset in order for Appleby's translation machine to translate, not just *a segment* of the full text sentence in the source language. In particular, in Appleby's system, it is essential to input a first sentence of the source document, and to map words of a first sentence of the source document and the corresponding sentence of the translation document in a translation step (see FIGs. 3-4 and paragraphs [0039]-[0046]). The user then draws dependency relationship lines between the boxes containing the words (see FIG. 6 and paragraphs [0048]-[0052]). However, Appleby nowhere discloses simply inputting *a segment* (i.e., the one or more keywords) of the full text sentence in the source language *without inputting a full text sentence in the source language*. Therefore, Appleby fails to teach "an input step in which the one or more keywords in the source language are input via an input means *without inputting a full text sentence in the source language*, the one or more keywords being a *segment* of the full text sentence in the source language" as recited in claim 1 and "input apparatus for inputting the one or more keywords in the source language *without inputting a full text sentence in the source language*, the one or more keywords being a *segment* of the full text sentence in the source language" as recited in claim 8.

In addition, the Examiner alleged that Appleby in paragraph [0167] discloses "a sentence pair extraction step in which a sentence pair extraction means extracts one or more sentence pairs each including at least one of the keywords from a parallel corpus database including partial

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correspondence information indicating correspondence between a word/phrase in the source

language and a word/phrase in the target language in each sentence pair" as recited in claim 1

and "a parallel corpus database including partial correspondence information indicating

correspondence between a word/phrase in the source language and a word/phrase in the target

language in each sentence pair" and "a sentence pair extraction means for extracting one or more

sentence pairs each including at least one of the keywords from the parallel corpus database" as

recited in claim 8. Applicants respectfully disagree.

In particular, Appleby in paragraph [0167] discloses:

> FIGS. 18a and 18b illustrate steps 610 to 694 in greater detail. In step 603, each surface structure is *compared in turn with the input text*. Each literal surface daughter node (node storing a literal word) *has to match a word in the source text string exactly*. Each aligned surface daughter (i.e. surface daughter corresponding to a further translation unit) is unified with the source head record of a translation unit, so as to build a surface tree for the source text. Most possible translation units will not lead to a correct translation. Those for which the list of daughters cannot be matched are rejected as candidates. (Emphasis added.)

As mentioned, since the input text is the full text sentence in the source language in Appleby,

each surface structure is compared in turn with each word of the full text sentence, and each

literal surface daughter node (node storing a literal word) has to match a word in the source text

string exactly. Unlike Appleby, the present invention simply extracts *a sentence including at*

least one of the keywords from a parallel corpus database, which is much simpler and more

efficient than Appleby's word-for-word match.

With regard to the Examiner's reliance on the secondary references, these references have

only been relied on for their teachings related to some dependent claims. These references also

fail to disclose the above combinations of steps and elements as set forth in amended

independent claims 1 and 8. Accordingly, these references fail to cure the deficiencies of Appleby.

Accordingly, none of the references utilized by the Examiner individually or in combination teach or suggest the limitations of independent claims 1 and 8 or their dependent claims. Therefore, Applicants respectfully submit that claims 1 and 8 and their dependent claims clearly define over the teachings of the references relied on by the Examiner.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §§ 102 and 103 are respectfully requested.

Additional Claims

Claims 15-18 have been added for the Examiner's consideration.

Applicants respectfully submit that claims 15-18 are allowable due to their respective dependence on independent claims 1 and 8, as well as due to the additional recitations included in these claims.

Favorable consideration and allowance of additional claims 15-18 are respectfully requested.

Additional Cited References

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the state of the art, no further comments are necessary with respect thereto.

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CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and

that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to

contact Cheng-Kang (Greg) Hsu, Registration No. 61,007 at (703) 205-8000 in the Washington,

D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a two (2)

month extension of time for filing a response in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future

replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any

additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: October 14, 2008

Respectfully submitted,

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